poses in the immediate future are not very bright."

In a postscript to the Review the author gives the literature down to March, 1898, which includes no less than eight books on the subject published in Europe.

It is unfortunate that Mr. Matthews uniformly omits initials of authors' names, for Berzelius, Wöhler and Moissan this is well enough, but we notice the names of Brown, Clarke and Jones, who certainly need initials. However, the Review is a welcome addition to chemical bibliography.

H. C. B.

*Brown Men and Women, or the South Sea Islands in 1895 and 1896.* By EDWARD REEVES. London, Swan, Sonnenschein & Co. 1898. With sixty illustrations and a map. Pp 294.

The author of this account was born in New Zealand, and from early days was acquainted with the peoples of the Pacific island-world. In 1895–6 he made two voyages to several of its archipelagoes, the Friendly Islands, the Samoan, Fijian, Society and Cook groups, jotting down his observations and clicking his camera as occasion offered. His attention was especially attracted by the social condition and prospects of the native population. This he claims to depict with more accuracy and a better knowledge than most previous writers.

The result may be briefly stated. He considers that they would be far better off if European civilization, and especially the Christian religion, were not forced upon them. His particular antipathy is the missionary. That wandering worthy he regards as the evil genius of Polynesia, and he repeatedly urges that subscriptions to 'foreign missions' should be stopped once for all. There is little of interest in the ethnographic observations, although the author must have had good opportunities.

D. G. BRINTON.

*Memory and its Cultivation.* By F. W. EDRIDGE-GREEN. New York, D. Appleton & Co. 1897. Pp. 307.

The author of this book says in his preface: "After discovering the facts which led me to write on the subject of memory, I found that I could learn a subject in about a fifth of the time that it previously took me." As he could have done it so easily, it is a pity that he did not learn something about psychology and physiology before attempting to write on these subjects. It is scarcely necessary for the scientific reader to go further than the frontispiece to understand the character of the book. This is a queer looking section of the brain, showing the 'center of sensory memory' and the 'center of motor memory' in the basal ganglia connected with the 'seat of the faculties of the mind' in the cortex. Further on we are told that there are thirty-seven of these faculties. Parental love is a faculty, but not conjugality, because 'conjugality is not likely to influence a man who hates his wife.' The book contains the stock anecdotes and mnemonic devices that may be picked up from desultory reading, and the author would doubtless pass for a man of wide information and agreeable parts in ordinary society. But it is a mystery why such a book should be published, as the last volume of the 'International Scientific Series'—a series which has maintained such a high standard and includes so many important scientific works.

J. MCKEEN CATTELL.

## SOCIETIES AND ACADEMIES.

### ACADEMY OF NATURAL SCIENCES, PHILADELPHIA, JULY 5, 1898.

MR. BENJAMIN SMITH LYMAN referred to the belief that chlorophyl required light for its production and exhibited an onion which in the course of seven months, without special nourishment, had grown long, green shoots in a dark closet. A potato in the same closet had sent out sprouts, but they contained no chlorophyl.

PROFESSOR HENRY A. PILSBRY communicated the results of his recent study of the molluscan group Aplacophora, dwelling specially on the characters distinguishing it from the gastropods. The former were first believed to be worms, but the discovery of a radula in the gullet and of a nervous system like that of the Chitons places them among the mollusks. They have a straight allimentary canal, while in the Chitons it is twisted and coiled. Although

living in mud, the Aplacophora are not mud feeders. The loss of the foot and shell is probably accounted for by their habitat. All the known species are European, not a single form having been recorded from the coasts of the United States, although it is quite likely they exist there.

Papers under the following titles were presented for publication: 'Contributions to Tropical Herpetology,' by Robert Baird McLain; 'Critical Notes on a Collection of Reptiles from the Western Coast of the United States,' by Robert Baird McLain; 'The Eastern Reptiles in the Collection of the Museum of the Stanford University Zoological Department,' by Robert Baird McLain.

EDWARD J. NOLAN,
*Recording Secretary.*

TORREY BOTANICAL CLUB, MAY 25, 1898.

THE evening was devoted to discussion and exhibition of acaulescent purple violets, introduced by a paper on 'The Acaulescent Violets,' by Mr. C. L. Pollard, of Washington, D. C., read by Dr. Hollick. This paper, soon to be printed, was the result of field study of the last two years, mainly in the Middle States, from which States most of our original species-types were derived. Mr. Pollard now describes 18 species and 3 varieties. He remarked that for violet characters we must depend upon unremitting field work. Herbarium material is useless, except as fortified by previous familiarity with the appearance while growing. Large numbers of individuals must be studied and every feature of the environment must be noted. Careful attention must be given not only to habit, but to habitat, to texture of herbage, to color of the flowers, to position of the cleistogenes, to nervation, to shape and pubescence of leaves, and to the nature of the surrounding vegetation.

A series of mounted specimens illustrating this paper was exhibited by Dr. Britton, and a large number of fresh specimens were passed, the result of collections sent in by Miss Sanial and by Messrs. Rusby and Crawford, and by Drs. Rusby and Hulst.

Discussion of the Eastern, stemless violets followed, in which Dr. and Mrs. Britton, Dr. Rusby, Mr. Bicknell and the Secretary participated.

Dr. Rusby referred to a very small and apparently unique violet collected by him at Franklin, N. J., some years since, distributed by him as *Viola cucullata cordifolia* of Gray, and remarkable because only about one inch high.

Mr. Howe, in behalf of Professor Lloyd, its discoverer, exhibited the original specimen of *V. MacCloskiei* Lloyd, from the State of Washington.

Mr. Bicknell spoke of the confluence of many surely distinct violet species.

Dr. Britton said that, while a number of violet species are clearly isolated in character, there is every gradation from these to the more critical species. The latter show all kinds of intermingling. The tendency to atavism, especially in the earlier, not maturely formed leaves, is very strong and often suggests the paternity of a species.

Dr. Britton announced that about 25 violet species are now growing at the botanic garden.

After much discussion of the characters on which Mr. Pollard's species rest, the Club was adjourned to the second Tuesday in October.

EDWARD S. BURGESS,
*Secretary.*

## NEW BOOKS.

*Vorlesungen über Theoretische Physik.* H. VON HELMHOLTZ. Band I., Abtheilung 2 Vorlesungen über die Dynamik discreter Massenpunkte. Edited by OTTO KRIGAR MENZEL. Band III., Vorlesungen über die Mathematischen Principien der Akustik. Edited by ARTHUR KÖNIG and CARL RUNGE. Leipzig, J. A. Barth. 1898. Pp. x + 380 and x + 256.

*Practical Plant Physiology.* W. DETMER. Translated by S. A. MOOR from the second German edition. London, Swan Sonnenschein & Co., Ltd.; New York, The Macmillan Co. 1898. Pp. xix + 555. $2.

*Proceedings of the American Association for the Advancement of Science.* Forty-sixth Meeting, held at Detroit, Mich., 1897. Salem, The Permanent Secretary. 1898. Pp. xxx + 499.